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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,727	10/19/2004	Akihiko Nishio	L9289.04167	2571

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EXAMINER

SAFAIPOUR, BOBBAK

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,727

Applicant(s)

NISHIO, AKIHIKO

Examiner

Bobbak Safaipoor

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The Replacement Drawing Sheets filed on September 20, 2006 are accepted by the examiner.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement submitted on 10/19/2004 has been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. **Claims 1, 4, and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kim et al (US Patent Application Publication #2002/0061764 A1)** in view of **English (United States Patent #7,058,035 B2)**.

Consider **claim 1, Kim et al** show a mobile station (UE) (communication terminal apparatus) (paragraph 4) used in a mobile (wireless) (paragraph 2) communication system that contains both hard and soft handover channels (read as first dedicated channel to which soft handover applies and a second dedicated channel to which hard handover applies) (paragraph 139; Fig 17c), the mobile station (UE) (communication terminal apparatus) (paragraph 4) comprising an embodiment (control section) (paragraph 150) when in SSDT mode is operating only in the uplink (paragraphs 18 and 151) where the power is identical to other fields in the DPCCH of the DCH (read as sets transmission power of an uplink second dedicated channel into a power equal to a transmission power of an uplink first dedicated channel) (page 12, claim 22). Furthermore, Kim et al '764 disclose that a mobile station (UE) (paragraph 4) operates the SSDT for the uplink (paragraph 0093) and sets the transmission power at a parameter P_p for transmitting in higher power level (addition) (paragraph 96) and a power offset P_{O1} (offset) (paragraph 96) (read as sets a transmission power of the uplink second dedicated channel at an addition of the transmission power of the uplink first dedicated channel and an offset). Kim et al '764 fail to disclose a judgment section that judges whether the first dedicated channel is in a soft handover state or not.

In the same field of endeavor, English shows and discloses, as known in the art, a base station controller that determines when soft handoff may be appropriate. The base station can

determine based upon the current requested data rate on the DRC in conjunction with the prior delivered transmission rates that soft handoff may be in order. In another embodiment, the base station controller determines when forward link soft handoff should be employed (read as whether first dedicated channel is in a soft handover state or not) (col. 13, lines 42-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the well known teachings of English into the system of Kim et al to determine if soft handover is employed based on the overall capacity optimization or mobile station measurements.

Consider **claim 4, Kim et al** show a main base station (paragraph 2) used in a mobile (wireless) (paragraph 2) communication system that contains both hard and soft handover channels (read as first dedicated channel to which soft handover applies and a second dedicated channel to which hard handover applies) (paragraph 139; Fig 17c), the main base station (paragraph 2) where a downlink power control is performed by controlling (sets) (paragraph 83) the DPCCCH (second dedicated channel) (paragraph 83) and DPDCH (first dedicated channel) (paragraph 83) power to be identical (same) (paragraph 83). Furthermore, Kim et al '764 show and disclose when the SSDT mode is not operated (downlink) (paragraph 18 indicates that the SSDT only operates in uplink) a power offset, P_p or P_{np} , when the base station which transmits the DSCH is the primary base station or not, respectively (read as sets transmission power of the downlink second dedicated channel at an addition of the transmission power of the downlink first dedicated channel and an offset) (paragraphs 98-102). Kim et al '764 fail to disclose a judgment section that judges whether the first dedicated channel is in a soft handover state or not.

In the same field of endeavor, English shows and discloses, as known in the art, a base station controller that determines when soft handoff may be appropriate. The base station can determine based upon the current requested data rate on the DRC in conjunction with the prior delivered transmission rates that soft handoff may be in order. In another embodiment, the base station controller determines when forward link soft handoff should be employed (read as whether first dedicated channel is in a soft handover state or not) (col. 13, lines 42-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the well known teachings of English into the system of Kim et al to determine if soft handover is employed based on the overall capacity optimization or mobile station measurements.

Consider **claim 7, Kim et al** show a transmission power control method used in a mobile (wireless) (paragraph 2) communication system that contains both hard and soft handover channels (read as first dedicated channel to which soft handover applies and a second dedicated channel to which hard handover applies) (paragraph 139; Fig 17c), wherein power control is performed by controlling (sets) (paragraph 83) the DPCCH (second dedicated channel) (paragraph 83) and DPDCH (first dedicated channel) (paragraph 83) power to be identical (same) (paragraph 83). Furthermore, Kim et al show and disclose a power offset, P_p or P_{np} , when the base station which transmits the DSCH is the primary base station or not, respectively (read as sets transmission power of the second dedicated channel is set at an addition of the transmission power of the downlink first dedicated channel and an offset) (paragraphs 98-102). Kim et al fail to disclose a judgment section that judges whether the first dedicated channel is in a soft handover state or not.

In the same field of endeavor, English shows and discloses, as known in the art, a base station controller that determines when soft handoff may be appropriate. The base station can determine based upon the current requested data rate on the DRC in conjunction with the prior delivered transmission rates that soft handoff may be in order. In another embodiment, the base station controller determines when forward link soft handoff should be employed (read as whether first dedicated channel is in a soft handover state or not) (col. 13, lines 42-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the well known teachings of English into the system of Kim et al to determine if soft handover is employed based on the overall capacity optimization or mobile station measurements.

6. **Claims 2, 3, 5, 6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (US Patent Application Publication #2002/0061764 A1) in view of English (United States Patent #7,058,035 B2), as applied to claims 1, 4, and 7 above, and further in view of Hamabe (US Patent Application Publication #2002/0115467).**

Consider **claim 2**, and **as applied to claim 1 above**, the teachings of Kim et al and English show and disclose the claimed invention, except for a reception section that receives the offset from a base station apparatus via a downlink second dedicated channel.

In the same field of endeavor, Hamabe show and disclose, as known in the art, that the offset value (Δ) is communicated in advance from the radio network controller RNC, also known as a base station controller, by DPCH 1 (DL) (read as receives the offset from a base station apparatus via a downlink second dedicated channel) (paragraphs 58 and 71; fig 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the well known teachings of Hamabe into the systems of Kim et al and English so that the communication terminal apparatus contains the offset to perform transmission power control.

Consider **claim 3**, and **as applied to claim 2 above**, Kim et al, as modified by English and Hamabe, further teach a calculation section that calculates a PO1 (transmission power offset) (paragraph 96) by equations 3 and 4 (paragraphs 94-95) used at the base station in accordance with reception SIR of a plurality of pilot channels.

However, the combinations of Kim et al, English, and Hamabe fail to teach a transmission section that transmits the offset calculated by said calculation section to the base station apparatus via the uplink second dedicated channel.

Nonetheless, Hamabe further teaches a transmission section that sends (transmits) (paragraph 75) the offset value (Δ) calculated by calculation section to the base station (paragraph 71) via the DPCH 2 (UL) (uplink second dedicated channel) (fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate the well known teachings of Hamabe into the systems of Kim et al and English to have the communication terminal apparatus comprise of both a calculation and transmission section in order to properly calculate and transmit the transmission power offset to the base station.

Consider **claim 5**, and **as applied to claim 4 above**, the systems of Kim et al and English show and disclose the claimed invention, except for a reception section that receives the offset from a communication terminal apparatus via an uplink second dedicated channel.

In the same field of endeavor, Hamabe show and disclose, as known in the art, that the offset value (Δ) is communicated from the mobile station via a DPCH 1 (UL) (read as receives the offset from a communication terminal apparatus via an uplink second dedicated channel) (fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the well known teachings of Hamabe into the systems of Kim et al and English so that the base station apparatus comprising the power offset to perform transmission power control.

Consider **claim 6**, and as **applied to claim 5 above**, Kim et al, as modified by English and Hamabe, further teach a calculation section that calculates PO1 (transmission power offset) (paragraph 24) used at the mobile station (communication terminal apparatus) (fig. 1) by transmitting a TPC signal of '0' if the established SIR is greater than the target SIR or transmitting a TPC signal of '1' if the established SIR is less than the target SIR (read as in accordance with a difference between SIR of the uplink first dedicated channel and a target SIR of the first dedicated channel) (paragraph 21).

However, the combinations of Kim et al, English, and Hamabe fail to teach a transmission section that transmits the offset calculated by said calculation section to the communication terminal apparatus via the downlink second dedicated channel.

Nonetheless, Hamabe further teaches a transmission section that sends (transmits) (paragraph 75) the offset value (Δ) calculated by said calculation section to the mobile station (paragraph 2) via the DPCH 1 (UL) (downlink second dedicated channel) (fig. 1; paragraph 71).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate the well known teachings of Hamabe into the systems of Kim et al and English to have the base station apparatus comprise of both a calculation and transmission section in order to properly calculate and transmit the power transmission power offset to the base station.

Consider **claim 8**, and **as applied to claim 7 above**, the systems of Kim et al and English show and disclose the claimed invention, except for a notification of the offset starts after the start of a soft handover of the first dedicated channel.

In the same field of endeavor, Hamabe show and disclose a schedule and different timing for sending data (read as the notification of the offset starts after the start of a soft handover of the first dedicated channel) (paragraph 67 and fig. 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate the well known teachings of Hamabe into the systems of Kim et al and English to have a timing scheme so that the overlapping of offsets do not occur.

Response to Arguments

7. Applicant's arguments, see pages 3-4, filed 9/20/2006, with respect to the rejection(s) of claim(s) 1, 4, and 7 under 35 USC 35 USC § 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art reference.

Conclusion

8. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipoor whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Friday from 9:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Bobbak Safaipour
B.S./bs

October 16, 2006

EDAN ORGAD
PATENT EXAMINER/TELECOMINT.

E. Orgad 10/16/06